

Title (en)

A multifunctional catalyst additive composition and process of preparation thereof

Title (de)

Multifunktionale Katalysatoradditivzusammensetzung und Verfahren zu deren Herstellung

Title (fr)

Composition d'additif de catalyseur multifonctionnel et son procédé de préparation

Publication

**EP 2522423 A3 20130123 (EN)**

Application

**EP 12167768 A 20120511**

Priority

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Abstract (en)

[origin: EP2522423A2] The present invention relates to a multifunctional catalyst additive composition for reduction of carbon monoxide and nitrogen oxides in a fluid catalytic cracking process comprising an inorganic oxide; alumino silicate or a zeolite; a noble metal; a metal of Group I A; a metal of Group II A; a metal of Group III A; a metal of Group IV A; a metal of Group V A; a rare earth oxide; at least a metal of Group VIII. The composition is attrition resistant and is incorporated on a support. The present invention also discloses a process for preparing the multifunctional catalyst additive composition. The present invention also discloses a fluid cracking catalyst comprising the multifunctional catalyst additive composition.

IPC 8 full level

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Citation (search report)

- [X] WO 2010137029 A1 20101202 - BHARAT PETROLEUM CORP LTD [IN], et al
- [A] US 2004072675 A1 20040415 - KELKAR C P [US], et al
- [A] US 6165933 A 20001226 - PETERS ALAN W [US], et al

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